

CTIOPI

Cerro Tololo Interamerican Observatory Parallax Investigation

The purpose of CTIOPI is to discover nearby white, red, and brown dwarfs that lurk unidentified in the solar neighborhood. Our goal is to discover 150 new southern star systems by determining trigonometric parallaxes accurate to 3 milliarcseconds.

CTIOPI is a project carried out by a team of astronomers from the United States and Chile using the 0.9m (shown here) and 1.5m CTIO telescopes located in the Chilean Andes. Through the generous support of NOAO, including 6 nights per month of observing time as part of the NOAO Surveys Program, we will increase the population of stars known within 25 pc of the Sun by 20% in the southern sky in only three years.

In the first panel to the right we illustrate the "bullseye" diagrams of targets selected at both telescopes for which we have made distance estimates. Note the large number of objects falling within the RECONS (10 pc) and NStars (25 pc) horizons. As of January 2001, there are 158 GOLD medal targets on the 0.9m program and 93 GOLD medal targets on the 1.5m program. The final panel to the right presents first results from CTIOPI: seven new members of the solar neighborhood, including one star only 7.6 pc away, which ranks 113th among nearby star systems.

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